ABSTRACT OF THE DISCLOSURE

A multiprocess computer system comprises at least two processes (P1, P2,...Pi,...PN) connected by a network. Each process is executed by a piece of hardware equipped with an operating system. A process comprises at least a library software layer by which this operating system can access the programs for the activation of the communications protocols associated with the inputs/outputs; an intermediate layer comprising an inter-process communications process associated with a communications channel; a multiplexer encapsulated in the library multiplexing the communications channel of a process Pi with the communications channels of the other processes P1, P2,...PN, the communications channel between two processes Pi, Pk being activated by the multiplexers of the two processes, upon a request by one of them. It can be used especially for extensive communications among various computer processes through standard inputs/outputs. More particularly, it can be used for the applications-transparent implementation of complex services such as services pertaining to client/server mode, distributed and concurrent processing, data flow control, malfunction tolerance, supervision, reconfiguration and dynamic extension as well as the modelling of the systems architecture.

Figure 4.